Lesson two: Graphing Linear Equations

Y=mx+b: This is the equation of a line.
M= slope
B= y-intercept

We will first do this by drawing a table.

The left values are the x-values we will plug into the equation. You may choose to pick any x-values you would like. For this problem, we will use -4, -2, 0, 2.

x	y = 2x + 3
-4	
-2	
0	
2	

Next, we will plug in these values into our equation y = 2x + 3. We will get our corresponding y-values.

x	y = 2x + 3
-4	2(-4) + 3 = -8 + 3 = -5
-2	2(-2) + 3 = -4 + 3 = -1
0	2(0) + 3 = 0 + 3 = 3
2	2(2) + 3 = 4 + 3 = 7

From this we will get coordinates on the line.

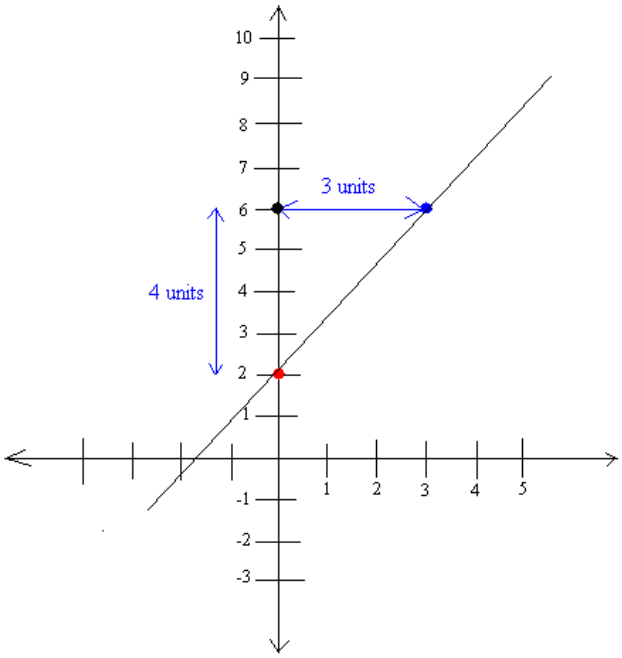
(x, y)
(-4, -5)
(-2, -1)
(0, 3)
(2, 7)

Another way to graph linear equations is to use slope and y-intercept to make the graph.

1. Locate the y-intercept on the graph and plot a point

2. From this point, use slope to find more points of the line
3. Draw a line to connect the points

For example: y = 4/3x + 2



To graph this equation, the first point graphed is y = 2 (y-intercept). Next, the slope is used to graph the next point. We rise 4 unites and run 3. If we wanted to find another point we could start at y = 2 and go down four units, over to the left 3 units.

Graphing linear equations tutorial video.

http://www.youtube.com/watch?v=UgtMbCI4G_I